



PATENT
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ATTORNEY MATTER NO. 467084-000104

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re. application of
Murphy et al.

Serial No.: 10/600,997

Filing Date: June 20, 2003

Entitled: Compositions and Methods for
Modulating Lymphocyte Activity

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) Examiner: OUSPENSKI, I.
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) Art Unit: 1644
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DECLARATION UNDER 37 C.F.R. § 1.131

Assistant Commissioner for Patents
Washington, D.C. 20231

The undersigned, Kenneth Murphy, Theresa Murphy, Norihiko Watanabe, and Jianfei Yang, hereby
declare as follows:

1. We are the inventors of the invention claimed in the subject application.
2. Prior to October 25, 2002 we had reduced to practice a human BTLA cDNA comprising the nucleotide sequence set forth at SEQ ID NO:7 of the subject application and encoding the human BTLA protein amino acid sequence set forth at SEQ ID NO:8 of the subject application.
3. Attached hereto is a photocopy exhibit (Exhibit A) showing the determined nucleotide sequence of an isolated human BTLA cDNA clone and the amino acid sequence translation thereof, which correspond to SEQ ID NO:7 and SEQ ID NO:8 of the subject application, respectively. All the work described in this declaration and in the attached exhibit was carried out in the United States by the inventors, either directly or under our supervision, and was completed prior to October 25, 2002. The attached exhibit is a photocopy of a laboratory notebook page of coinventor Theresa Murphy. The actual date appearing on the laboratory notebook page has been redacted in the attached exhibit.

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4. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: _____
NORIIHIKO WATANABE

Date: 9/21/04 Theresa Murphy
THERESA MURPHY

Date: 9/21/06 Kenneth Murphy
KENNETH MURPHY

Date: _____
JIANFEI YANG

5' 11 21 31 41 51 61 71 81 91
+2 R L C P R R M L P A A W R P R E F D F F H H & Y V Q E M K T L P A
1 CCGTCTGTGC CCNCGTCGCA TGCTCCCGGC CGCCTGGCGG CCGCGGGAAT TCGATTTTTT CCAZCACTGA TATGTGCAGG AAATGAAGAC ATTGCCTGCC
l.seq CCGTCTGTGC CCNCGTCGCA TGCTCCCGGC CGCCTGGCGG CCGCGGGAAT TCGATTTTTT CCAZCACTGA TATGTGCAGG AAATGAAGAC ATTGCCTGCC
rc.seq GGN-----

5' 11 21 31 41 51 61 71 81 91
+2 M L G T G K L F W V F F L I P Y L D I W N I H G K E S C D V Q L Y
101 ATGCTTGGAA CTGGGAAATT ATTTTGGGTC TTCTTCTTAA TCCCATATCT GGACATCTGG AACATCCATG GGAAAGAATC ATGTGATGTA CAGCTTTATA
l.seq ATGCTTGGAA CTGGGAAATT ATTTTGGGTC TTCTTCTTAA TCCCATATCT GGACATCTGG AACATCCATG GGAAAGAATC ATGTGATGTA CAGCTTTATA
rc.seq -----

5' 11 21 31 41 51 61 71 81 91
+2 I K R Q S E H S I L A G D P F E L E C P V K Y C A N R P H V T W C K
201 TAAAGAGACA ATCTGAACAC TCCATCTTAG CAGGAGATCC CTTTGAAC TAATGCCCTG TGAATACTG TGCTAACAGG CTTCACTGTA CTTGGTGCAA
l.seq TAAAGAGACA ATCTGAACAC TCCATCTTAG CAGGAGATCC CTTTGAAC TAATGCCCTG TGAATACTG TGCTAACAGG CTTCACTGTA CTTGGTGCAA
rc.seq -----

5' 11 21 31 41 51 61 71 81 91
+2 L N G T T C V K L E D R Q T S W K E E K N I S F F I L H F E P H L
301 GCTCAATGGA ACAACATGTG TAAAACTTGA AGATAGACAA ACAAGTTGGA AGGAAGAGAA GAACATTTC TTTTTCATTC TACATTTTGA ACCAATGCTT
l.seq GCTCAATGGA ACAACATGTG TAAAACTTGA AGATAGACAA ACAAGTTGGA AGGAAGAGAA GAACATTTC TTTTTCATTC TACATTTTGA ACCAATGCTT
rc.seq -----

5' 11 21 31 41 51 61 71 81 91
+2 P N D N G S Y R C S A N P Q S N L I E S H S T T L Y V T D V K G A
401 CCTAATGACA ATGGGTCATA CCGCTGTTCT GCAAAATTTT AGTCTAATCT CATTGAAAGC CACTCAACAA CTCCTTATGT GACAGATGTA AAAGGTGCTT
l.seq CCTAATGACA ATGGGTCATA CCGCTGTTCT GCAAAATTTT AGTCTAATCT CATTGAAAGC CACTCAACAA CTCCTTATGT GACAGATGTA AAAGGTGCTT
rc.seq -----

5' 11 21 31 41 51 61 71 81 91
+2 S E R R S E D E V A S R P W L L Y S L L R L G G L P J L I T T W F C
501 CAGAAGGACC CTCCAAGGAC GAAGTGGCAA GCAGACCCTG GCTCCTGTAT AGTTTACTTC CTTTGGGGGG ATTGCCTCTA CTCATCACTA CTTGGTCTG
l.seq CAGAAGGACC CTCCAAGGAC GAAGTGGCAA GCAGACCCTG GCTCCTGTAT AGTTTACTTC CTTTGGGGGG ATTGCCTCTA CTCATCACTA CTTGGTCTG
rc.seq CNGAAGCGCC CTCCAAGGAN GAA-TGNCAN GCAGACCCTG GCTCCTGTAT AGTTTACTTC CTTTGGGGGG ATTGCCTCTA CTCATCACTA CTTGTTTCTG

5' 11 21 31 41 51 61 71 81 91
+2 L F C C L R R H Q G K Q N E L S D T A G R E I N L V D A H L K S E
601 CCTGTTCTGC TGCTGAGAA GGCACCAAGG AAAGCAAAAT GAATCTCTG ACACAGCAGG AAGGGAATT AATCTGGTTG ATGCTCACCT TAAGAGCGAG
l.seq CCTGTTCTGC TGCTGAGAA GGCACCAAGG AAAGCAAAAT GAATCTCTG ACACAGCAGG AAGGGAATT AATCTGGTTG ATGCTCACCT TAAGAGCGAG
rc.seq CCTGTTCTGC TGCTGAGAA GGCACCAAGG AAAGCAAAAT GAATCTCTG ACACAGCAGG AAGGGAATT AATCTGGTTG ATGCTCACCT TAAGAGCGAG

5' 11 21 31 41 51 61 71 81 91
+2 O T E A S T R Q N S Q V L L S E A G I Y D N D P D L C F R M Q E G
701 CAAACAGAAG CAAGCACCAG GCAAAATTC CAAGTACTGC TATCAGAAGC TGAATTTAT GATAATGACC CTGACCTTTG TTTCAGGATG CAGGAAGGGT
l.seq CAAACAGAAG CAAGCACCAG GCAAAATTC CAAGTACTGC TATCAGAAGC TGAATTTAT GATAATGACC CTGACCTTTG TTTCAGGATG CAGGAAGGGT
rc.seq -----

5' 11 21 31 41 51 61 71 81 91
+2 S E V C S N P C L E E N K P G I V Y A S L N H S V I G L N S R L A R
801 CTGAAGTTTG TTCTAATCCA TGCTGGAAG AAAACAAACC AGGCATTGTT TATGCTTCCC TGAACCATTC TGTCATTGGA CTGAACCTCA GACTGGCAAG
l.seq CTGAAGTTTG TTCTAATCCA TGCTGGAAG AAAACAAACC AGGCATTGTT TATGCTTCCC TGAACCATTC TGTCATTGGA CTGAACCTCA GACTGGCAAG
rc.seq -----

5' 11 21 31 41 51 61 71 81 91
+2 N V K E A P T E Y A S I C V R S V C Q Q G P I T S E F A A
901 AAATGTAAA GAAGCACCAA CAGAATATGC ATCCATATGT GTGAGGAGTT AAGTCTGTNN CTGACNCCAA CAGGGNCCAA TCACTAGTGA ATTCGCGGCC
l.seq AAATGTAAA GAAGCACCAA CAGAATATGC ATCCATATGT GTGAGGAGTT AAGTCTGTNN CTGACNCCAA CAGGGNCCAA TCACTAGTGA ATTCGCGGCC
rc.seq -----

5' 11 21 31 41 51 61 71 81 91
+2 A C R S T I W E S S R V G G L E G N E
1001 GCCTGCAGGT CGACCATATG GGAGAGCTCC CANCGCGTTG GGGGCTTGA AGGTANNNG AATCANGAA
l.seq GCCTGCAGGT CGACCATATG GGAGAGCTCC CANCGCGTTG GGGGCTTGA AGGTANNNG AATCANGAA
rc.seq -----

EXHIBIT A